

WHAT IS CLAIMED IS:

1. A seal retainer for an undersea hydraulic coupling member, comprising a metal seal for creating a pressure energized seal between a seal retainer and a probe of a male coupling member.
2. The seal retainer of claim 1 wherein the metal seal is a metal lip seal.
3. The seal retainer of claim 2 wherein the metal lip seal is machined so that it is slightly displaced when the probe of the male coupling member is inserted.
4. The seal retainer of claim 3 wherein the displacement of the metal lip seal is about 0.001 inches.
5. The seal retainer of claim 2 wherein the metal lip seal is machined from the body of a seal carrier.
6. The seal retainer of claim 2 wherein the metal lip seal is configured to be pressure energized by fluid attempting to flow out of the hydraulic coupling along the probe of the male member.
7. The seal retainer of claim 1 wherein the metal seal is a metal concave seal.
8. The seal retainer member of claim 7 wherein the metal concave seal may be pressure energized by fluid flow in either direction around the seal retainer.
9. The seal retainer of claim 1 further comprising a second pressure energized metal seal.
10. The seal retainer of claim 9 wherein the second pressure energized metal seal is a metal concave seal.
11. An undersea hydraulic coupling member comprising a seal retainer comprising a first metal pressure energized seal for forming a seal between the seal retainer and a probe of a male coupling member, and a second pressure energized metal seal for forming a seal between the seal retainer and a shoulder of a female coupling member containing the seal retainer.
12. The undersea hydraulic coupling member of claim 11 wherein the first metal pressure energized seal is a metal lip seal.
13. The undersea hydraulic coupling member of claim 12 wherein the second pressure energized metal seal is a metal concave seal.
14. The undersea hydraulic coupling member of claim 12 wherein the metal lip seal is slightly displaced when the probe of the male coupling member is inserted into the female coupling member.

15. The undersea hydraulic coupling member of claim 13 wherein the metal concave seal is slightly displaced when the seal retainer is installed in the female coupling member.
16. The undersea hydraulic coupling member of claim 14 wherein the displacement of the metal lip seal is about 0.001 inches.